TELVENT
Farradyne

Traveler Information Data Accuracy and Coverage Needs

Les Jacobson

California 511 Workshop: The 511 Your Customers Want

March 4, 2008

Outline

- User Needs
- Past work on data needs
- Considerations
  - Flexibility
  - Accuracy
  - Multimodal
  - Normal conditions vs incidents or events

Match Data to User Needs

- Talk to users
  - Define your users – be as inclusive as you can!
- Vision for the 511 system
- ConOps
- Requirements

ITS America Survey of ISPs, 1999

- Data collection priorities
  - Traffic speeds
  - Incidents
  - Road conditions
  - Current and scheduled work zones
  - Weather conditions

National 511 Coalition
Basic Content Guidelines – Highways

Content:

- Construction/maintenance projects
- Road closures and major delays
  - Includes major incidents/accidents and congestion
- Major special events
- Forecasted weather and road surface conditions

- In urban areas, add:
  - All incidents, accidents and congestion information

- Strong encouragement to deploy if possible
  - Segment travel times
  - Observed weather and road surface conditions

National 511 Coalition: Data Fusion System

- Fusion engine must be in place to receive incoming data (automated or manually generated)

- Fusion engine must be capable of creating structured data (parse-able database) for delivery to dissemination platforms.

Flexibility

- Ability to add or change coverage
  - Needs will change
  - Conditions will change
  - Technology will change
  - Need to be able to respond to or take advantages of changes

Accuracy

- User perspective on information accuracy is most important
- Relative accuracy may be more important than absolute accuracy

Multimodal

- Transit
  - Departure information
  - Location information
  - Schedule adherence
- Traffic
  - Speed, congestion, travel times
  - Incidents
  - Closures / work zones

Normal conditions vs incidents or events

- Are data needs different?
- What information do users want in these conditions?
  - Closure information
  - Detour information
  - Traffic conditions on detour routes
  - Information from emergency managers
- Data in emergencies
  - Portable devices to cover detours
  - More input from Maintenance, Police, and Emergency Services

Bay Area Example: Information Tailored to Event

- Data Tailored to Event + User Needs
  - Static maps with detour information
  - Detour driving times
  - New "ticker" to share information on all sister sites
  - Re-structured, flexible menu
  - Floodgates at more menu locations
  - Improved floodgate tool
  - Out of Service Links
    - Automatically provides new trips when a critical link is out of service
  - Portable data collection devices

Other Considerations

- Geographic Coverage
  - What areas and facilities will be covered?
  - Freeways?
  - Arterials?
  - Rail?
  - Buses?
- Accessibility and Data Ownership
  - What can you use third party data for?

Thank you!